DRAFT Decision Notice and
Finding of No Significant Impact
Dungeness Large Wood Enhancement Project
USDA Forest Service
Hood Canal Ranger District, Olympic National Forest
Clallam County, Washington

Introduction

This Decision Notice and Finding of No Significant Impact (DN/FONSI) documents my decision to implement the Dungeness Large Wood Enhancement Project Proposed Action. This project is the result of a strong collaborative effort between the Olympic National Forest and the Jamestown S'Klallam Tribe. The Environmental Assessment (EA) for the Dungeness Large Wood Enhancement Project has been prepared pursuant to the requirements of the National Environmental Policy Act (NEPA, 40 CFR 1500-1508) and the National Forest Management Act (NFMA, 36 CFR 219). The decision authorizes restoration treatments to improve fish habitat within the Dungeness and Gray Wolf Rivers. Log jams will be constructed in four separate reaches of the Dungeness and Gray Wolf Rivers on National Forest System lands, between approximately river mile (RM) 13.4 to 14.2 on the Dungeness River and RM 0.4 to 2.0 on the Gray Wolf River. Approximately 15 strategically located log jams will be placed by helicopter along the four reaches of the rivers and three existing log jams will be stabilized. Approximately 120 second growth trees, ranging from 18 to 27 inches in diameter will be removed, with roots attached, to provide the necessary large woody material for the project. The trees will be removed from within the Canyon Creek drainage, off of Forest Road 2878.

Background

This action will occur within the Dungeness Watershed, specifically the Middle Dungeness River and Lower Gray Wolf River subwatersheds. The project area is located on the Hood Canal Ranger District of the Olympic National Forest, in Clallam County, Washington. The legal location of the project is: T29N, R3W, Sections 19, 30, 31, and T29N, R4W, Sections 24, 27, 36, Willamette Meridian. The two main reaches on the Dungeness River are at approximately RM 13.4, along the Olympic National Forest boundary, and RM 14.2. Reaches along the Gray Wolf River are from RM 0.4 to RM 0.8, above the Dungeness Forks Campground and below the 2870 bridge, and from RM 1.8 to RM 2.0, at the Cat Creek confluence.

The project is necessary because in-stream habitat conditions for fish are in a degraded condition as a result of past management activities in the watershed, including clear-cut logging and the removal of naturally occurring logjams and other instream large wood. The creation and maintenance of stable large wood complexes in stream channels is one of the key aquatic habitat-forming processes in Pacific Northwest Rivers. Large woody debris jams play a dominant role in controlling channel morphology, storing and routing sediment, and forming

fish habitat. Stable wood jams create habitat diversity by forming pools, back eddies, and side channels, and by increasing channel sinuosity and hydraulic complexity.

Because of past timber harvest in riparian areas along the Dungeness and lower Gray Wolf Rivers, the growth and recruitment of the extremely large trees that have the capability to form key structures in stable log jams will continue to be below natural levels for the foreseeable future. Observations suggest that if nothing is done, the general trend of relatively small wood pieces racking up into transient logjams that disappear or shift positions frequently will continue indefinitely.

Habitat restoration in the Dungeness River is identified as a key recovery action in the recovery plan for Puget Sound Chinook. Large wood additions to the river channel have specifically been identified as a priority habitat improvement within The North Olympic Peninsula Lead Entity's 2012 Three-Year Work Plan. Large wood enhancement in the Dungeness and Gray Wolf Rivers has also been identified in the Draft Recovery Plan for the Coastal-Puget Sound Distinct Population Segment of Bull Trout. Large wood placement in the Dungeness and Gray Wolf Rivers is identified as a priority restoration action in the Draft Collaborative Restoration Plan and in the Forest Service's Watershed Restoration Action Plan for the Middle Dungeness subwatershed.

The primary objective for the Dungeness River Large Wood Enhancement Project is to improve habitat for Endangered Species Act (ESA) listed salmon, steelhead, and bull trout by increasing in-stream complexity, and improving the following habitat elements:

1. Channel length and edge habitat

2. Pool frequency

3. Stability and retention of organic debris

4. In-stream cover

5. Sorting and stability of streambed substrate

6. Floodplain connectivity (frequency of side channel and overbank inundation)

The Proposed Action is described in detail in the section below.

Management direction for the project comes from the 1990 *Olympic National Forest Land and Resource Management Plan* (LRMP) as amended by the 1994 *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl (ROD).* The 1994 ROD, along with its Standards and Guidelines, is commonly known as the Northwest Forest Plan. The 1990 LRMP, as amended by the 1994 ROD, is referred to as the Forest Plan in this Decision Notice. Forest Plan land allocations within the project area are Adaptive Management Area (AMA), Late-Successional Reserve (LSR), and Riparian Reserve (RR).

Decision and Rationale

After careful review and consideration of the public comments and analysis disclosed in the Dungeness Large Wood Enhancement Project EA, I have decided to implement the Proposed Action, as described in the EA (pp. 19-21). My decision includes implementing all of the project design criteria and mitigation measures described in the EA (pp. 22-25). My decision is based on a review of the EA and the project record, which shows a thorough evaluation of relevant scientific information, a consideration of responsible opposing views, and acknowledgement of incomplete or unavailable information, scientific uncertainty, and risk.

In making this decision, I examined the proposed construction of the log jams, other restoration treatments, and related activities in relationship to the goals and objectives of the Forest Plan. I considered the responsiveness of the alternatives to the issues identified in the EA; applicable laws and policy; Tribal Treaty rights; and public input. I considered the effects of implementing the project Proposed Action alternative and the No-Action Alternative on the physical, biological, social, and economic environment. I believe the Proposed Action provides the best balance among these considerations. Implementing the Proposed Action with its project design criteria and mitigation measures will provide long-term benefits to the resources with minimal adverse impacts and is necessary to improve habitat conditions for fish species within the watershed.

The Proposed Action includes:

1. Creation of heavy equipment access trails into and inside the proposed wood source units. Excavators will use trails to access wood source units. Access trails will be located mainly on old road grades and skid trails. No new road construction will occur. Access trails will be rehabilitated prior to completion of the restoration project and blocked using earth berms to prevent future vehicle use.

2. Removal of approximately 120 second-growth trees from wood source units to provide the woody material for the log jams. The trees will be trucked to staging areas on roads close to the proposed log jam sites.

3. Utilization of a helicopter to transport trees to the log jam project sites along the Dungeness and Gray Wolf Rivers and construct the log jams.

4. Construction of approximately 15 strategically placed log jams along the main river channels, and stabilization of three existing natural log jams.

The log jams are intended to scour pools and reactivate relic side-channels, and to serve as starting points for larger log jams that form as mobile woody material is caught up against the structures. See the EA, Appendix A for design plans.

Each log jam will consist of approximately 8 (18-27 inches in diameter) trees and 4 bundles of slash (4-17 inches in diameter woody material). The majority of the trees will have attached rootwads. Because the log jams will be placed within a high energy river environment, a rock collar anchoring system will be incorporated into the design of the log jams for added stability. Rock collars, which act as ballast are made of large rocks connected by a short length of steel

cable. Each log jam will have approximately nine rock collars. All materials will be placed using a helicopter.

Approximately 120 second growth trees will be needed to provide the necessary large wood for the project. Trees ranging from 18 to 27 inches in diameter will be removed from a total of up to 2 acres of second-growth forest stands in the AMA land allocation, within the Middle Dungeness River subwatershed. There are 6 potential wood source units within the Canyon Creek drainage, off FSR 2878, varying in size from 0.1 to 0.5 acre. Most of the trees will be pushed over with an excavator and removed with their roots attached. Some of the trees will be felled by chainsaw. Tree removals will create a variety of small openings. All tree removals will be coordinated with wildlife and silviculture specialists to accomplish multiple objectives and minimize resource impacts.

Mitigation Measures and Design Features

Project design criteria and mitigation measures were developed for the action alternative and will be implemented to insure compliance with direction in the Forest Plan and Forest program direction, as well as to avoid or minimize adverse impacts of project implementation. Specific project design criteria and /or mitigation measures were developed for the following areas: terrestrial wildlife; invasive plants; botany; water quality; fisheries; cultural resources; recreation and public safety. These requirements, which are described in the EA on pages 22-25, are expected to minimize potential adverse effects of management activities. Implementation of these features is considered to be highly effective.

Monitoring and Adaptive Management

Specific monitoring activities will be implemented to assure that implementation of elements of my decision are carefully tracked during and after project implementation. Monitoring activities are described on page 25-26 of the EA. The information gained through post-implementation monitoring will be used to inform the planning and design of future log jam projects.

Alternatives Considered

Two alternatives were considered in detail in the EA: one that included activities to help restore appropriate habitat-forming processes and improve the quality and quantity of aquatic habitat for salmon and trout species on National Forest System lands in the reaches of the Dungeness and Grey Wolf River (Proposed Action), and one that would not (No-Action Alternative).

I did not select the No-Action Alternative because it does not meet the purpose and need of accelerating the restoration of appropriate habitat-forming processes and improving the quality and quantity of aquatic habitat for salmon and trout species, including federally threatened Chinook and steelhead, on NFS lands in the Dungeness and Gray Wolf Rivers. Fish habitat conditions in the project reach would remain in their current degraded condition for the foreseeable future. The lack of large key pieces of instream wood and stable natural log jams would continue to inhibit the creation and maintenance of juvenile rearing habitat, suitable spawning sites, and habitat diversity. The existing riparian trees would eventually grow large enough to form key pieces and begin to be recruited into the stream channel in large enough numbers to begin to form stable log jams, but the trees would need to be very large (i.e 36 inch

diameter) to be effective. Recovery would be a very long-term process that would likely take 50 to 100 years or more.

Alternatives Considered but Eliminated from Detailed Study

I considered three additional alternatives, but eliminated them from detailed analysis in the EA for the reasons described below.

Passive Restoration Only. Passive restoration of degraded ecosystems involves the removal or modification of human-caused disturbances that are resulting in degradation. In the case of the Dungeness Large Wood Enhancement Project area, passive restoration is already being implemented through current land management practices, which emphasize habitat restoration over resource extraction. A passive-restoration-only alternative is effectively equivalent to the No-Action Alternative. Therefore, a passive-restoration-only alternative was eliminated from consideration (See EA, pg. 18).

Alternative Methods of Log Jam Construction. Several alternative methods to create the desired log jams were considered during the initial design process but they were not carried forward because they were not considered feasible for meeting the purpose and need of the project (See EA, pg. 19).

Public Involvement and Tribal Consultation

The Dungeness Large Wood Enhancement Project was listed on the Olympic National Forest's *Schedule of Proposed Actions* (SOPA) on April 1, 2014. Letters of consultation were mailed to the Jamestown S'Klallam Tribe, Port Gamble S'Klallam Tribe, and Lower Elwha S'Klallam Tribe on August 27, 2014. On September 19, 2014, I sent a scoping letter to concerned citizens, organizations, and state, federal, and local government agencies that have expressed an interest in the Forest's management activities. The letter described the Proposed Action, and requested comments.

Based on comments received from the public and other agencies, the Forest's interdisciplinary team and I developed a list of issues to address when considering project design criteria and mitigation measures, and alternatives or modifications to the Proposed Action. The preliminary EA was circulated via email to 269 interested or affected parties for a 30-day comment period beginning on January 29, 2016. One comment was received. A response to the comment received is provided in Table DN-1 below. No modifications were made to the preliminary EA following the comment period.

Finding of No Significant Impact

After considering comments from the public and the environmental effects described in the EA, I have determined that implementation of the Proposed Action does not constitute a major federal action significantly affecting the quality of the human environment. Thus, an environmental impact statement (EIS) will not be prepared (40 CFR 1508.27). This determination of no significant impact is based on the EA, the design of the selected alternative (Proposed Action), and on the following factors:

Context of Action

Project activities will be local and short-term. Approximately 120 trees will be removed over a 2 acre area to provide wood for the log jams. No road construction is proposed, and existing trails and road beds will be utilized by heavy equipment. Fifteen log jams will be constructed within four reaches of the Middle Dungeness River and the Lower Gray Wolf River. This represents a small percentage of the length of stream habitat potentially available for use by anadromous salmon and steelhead within the watershed. ESA listed Puget Sound Chinook and Puget Sound steelhead are known to spawn within the project area in low numbers.

Intensity of Effects

The environmental effects of the following actions are documented in Chapter 3 of the Dungeness Large Wood Enhancement Project EA. The beneficial and adverse direct, indirect, and cumulative effects of these activities have been disclosed in the EA. Effects are expected to be low in intensity because of standard management practices and the project design criteria and mitigation measures described on pages 22-25 of the EA.

1. **Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on the balance the effects will be beneficial.**

   Potential beneficial and adverse effects were considered in the analysis of the Proposed Action. The analysis considered both direct and indirect effects, and also the project's contribution to the cumulative effects of other past, present, and reasonably foreseeable actions in the watershed. Potential adverse effects of implementing the Proposed Action will be reduced or eliminated by the application of the required project design criteria and mitigation measures. Potential adverse effects include localized increases in turbidity and, sedimentation during construction activities. Spawning habitat may potentially be adversely affected by localized disturbance during construction activities and during the first several high flows the following fall and winter after the project is implemented as the streambed adjusts to the new structures. Beneficial effects include accelerating the restoration of appropriate aquatic habitat-forming processes, a long-term, localized increase in the frequency of stable log jams; long-term, localized improvement in the amount and stability of spawning gravels; and long-term, localized improvement in the amount of high quality, complex rearing habitat within the project area. Neither the beneficial nor adverse effects as discussed in the EA are deemed to be of sufficient intensity to be identified as significant.

2. **The degree to which the Proposed Action affects public health or safety.**

   The project will not have a significant effect on public health or safety (see EA, pg. 25 for safety measures). The log jam structures will be designed to mimic naturally occurring accumulations of instream wood. Structures will not span the river channel and will be designed to allow safe passage by kayakers. Cable anchor structures will be inspected annually for safety. Construction areas will be closed as needed to protect public safety during project operations. Mitigation measures and design features will protect worker

safety during project implementation. Effects on water quality (sediment) will be limited in magnitude, short-term, and localized due to mitigation measures and project design features.

3. **Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.**

   There will be no significant effects to unique characteristics of the area. No historic or cultural resources will be affected with this proposal. The project is not in close proximity to prime farmlands or ecologically critical areas. Wetlands located within the project area will be protected by project design criteria. No project activities will occur within designated Wilderness, within the Olympic National Park. Project activities taking place within the Quilcene Unroaded Area (Inventoried Roadless Area) will have no effect on the roadless area characteristics of the area and are not among those activities prohibited or requiring detailed review as provided for by the 2001 Roadless Area Conservation Rule (36 CFR 294)(EA, pp. 75-77). The project is consistent with the management direction for portions of the Dungeness and Gray Wolf proposed for designation as a Wild and Scenic Rivers (EA, pp. 73-75). The project will be beneficial to Riparian Reserves and floodplains through accelerating restoration of appropriate aquatic habitat-forming and stream channel processes.

4. **The degree to which the effects on the quality of the human environment are likely to be highly controversial.**

   The effects of this project on the quality of the human environment are not likely to be highly controversial. The log jams will be designed to imitate natural instream wood accumulations. Within a few years after project completion they will be more-or-less indistinguishable from natural logjams. The Forest Plan allows for fish habitat restoration and the associated tree removal in the project area, and these activities have historically been conducted in this area.

5. **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.**

   The effects of this project are not highly uncertain, and do not involve unique or unknown risks. Engineered Log Jam structures have been constructed throughout the Pacific Northwest to restore stream channel processes and improve fish habitat for over a decade. At least five log jam projects have been completed on rivers on the Olympic Peninsula.

6. **The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.**

This action will not establish a precedent for future actions with significant effects, and does not represent a decision in principle about a future consideration. Fish habitat restoration and instream large wood placement projects are not new activities on the forest, and follow common practices with known results. The project design criteria and mitigation measures are known to be effective in reducing risks associated with project activities. I believe the EA sufficiently addressed and analyzed all major issues associated with the project.

7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.**

   Implementation of the Proposed Action does not represent potential cumulative adverse impacts when considered in combination with other past, present, and reasonably foreseeable future actions. My review of the discussion of effects in chapter 3 of the EA indicates no likelihood of cumulatively significant impacts to the environment. Potential restoration projects in the watershed on other ownerships and in the estuary are speculative at this time. Any other restoration projects implemented within the watershed would also be designed to improve habitat and would likely result in small incremental improvements in overall aquatic habitat conditions over time.

8. **The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places or may cause loss or destruction of significant cultural or historic resources.**

   It was determined that the action will not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor will it cause loss or destruction of significant scientific, cultural, or historical resources. No eligible historic properties were found during surveys of the project area. The Washington State Office of Archaeology and Historic Preservation (SHPO) concurred with the No Effect finding (letter on file at the Olympic National Forest).

9. **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.**

   The proposed project actions and effects thereof, including removal of trees at the source stand and installing the large wood structures in the river, are consistent with those described by US Fish and Wildlife Service and National Marine Fisheries Service Endangered Species Act-Section 7 Programmatic Consultation Conference and Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Essential Fish Habitat Response for Aquatic Restoration Activities in the States of Oregon and Washington (ARBOII).

10. **Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.**

    This action does not threaten a violation of any Federal, State, or local laws or requirements for the protection of the environment. The Proposed Action is consistent with the Forest Plan, and is in compliance with the Clean Water Act and the Clean Air Act. It was designed to be in compliance with all applicable laws and regulations.

Findings Required by Other Laws and Regulations

The decision to approve the Dungeness Large Wood Enhancement Project Proposed Action is consistent with the intent of the Forest Plan's long-term goals and objectives. The project was designed in conformance with standards and guidelines in the 1990 *Olympic National Forest Land and Resource Management Plan* (LRMP) as amended by the 1994 *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl.* I have carefully reviewed the EA including the supporting analysis for consistency with the Northwest Forest Plan's Aquatic Conservation Strategy objectives (EA, pp. 46-49) in accordance with the 1994 ROD. The applicable watershed analysis and the EA include descriptions of the existing condition, range of natural variability of important physical and biological components of the watersheds, and how the proposed project maintains the existing condition or moves it within the range of natural variability. Based on my review of the EA, the 1994 ROD, and the watershed analysis, I have determined that this project does not prevent attainment of the Aquatic Conservation Strategy objectives.

I have determined that this project is consistent with the National Forest Management Act (NFMA) requirements at USC 1604. This decision is consistent with all applicable acts and regulations as documented in the EA, pages 82-85 including: Effects on Inventoried Roadless Areas, Wilderness Areas, or Potential Wilderness Areas; Clean Water Act; Clean Air Act; Irretrievable or Irreversible Commitment of Resources; Adverse Effects that Cannot Be Avoided; Conflicts with Plans, Policies, or Other Agencies and Jurisdictions; Effects on Prime Farm Land, Range Land and Forest Land; Potential or Unusual Expenditures of Energy; Endangered Species Act; Effects on Wetlands and Floodplains; Effects on American Indians; Effects on Cultural Resources/National Historic Preservation Act; Executive Order 12898, Civil Rights, Minority Groups, and Environmental Justice.

Administrative Review Opportunities

This proposed decision is subject to objection pursuant to 36 CFR 218, Subparts A and B. Objections will only be accepted from individuals or organizations that submitted project-specific written comments during a designated opportunity for public participation (scoping or 30-day public comment period). Issues raised in objections must be based on previously submitted comments unless based on new information arising after the designated comment period.

Objections must be submitted within 45 days following the publication of the legal notice in The Peninsula Daily News, Port Angeles, Washington. The date of this legal notice is the exclusive means for calculating the time to file an objection. Those wishing to file an objection should not

rely upon dates or timeframes provided by any other source. It is the objector's responsibility to ensure evidence of timely receipt (36 CFR 218.9).

Objections must be submitted to the reviewing officer: Acting Forest Supervisor, Larry Sandoval, 1835 Black Lake Blvd. SW, Olympia, WA 98512. Please put OBJECTION and the project name in the subject line. Objections may be submitted via mail, FAX (360-956-2330), or delivered during business hours (M-F 8:00am to 4:30pm). Electronic objections, in common formats (.doc, .pdf, .rtf, .txt), may be submitted via the project website listed below. Under the "Get Connected" heading on the right, click "Comment/Object on Project" and follow instructions.

Objections must include (36 CFR 218.8(d)): 1) name, address and telephone; 2) signature or other verification of authorship; 3) identification of a single lead objector when applicable; 4) project name, Responsible Official name and title, and name of affected National Forest(s) and/or Ranger District(s); 5) reasons for, and suggested remedies to resolve, your objections; and, 6) description of the connection between your objections and your prior comments. Incorporate documents by reference only as provided for at 36 CFR 218.8(b).

Timing of Decision and Implementation

If no objections are filed within the 45-day objection time period, the decision may be signed 5 business days following the end of the objection period.

Implementation may occur immediately following the date that this final decision is signed.

Contact

The EA and decision notice can be downloaded from the forest website at: http://www.fs.fed.us/nepa/nepa_project_exp.php?project=43811

For additional information concerning this decision, contact Bob Metzger, Aquatic Program Manager, Olympic National Forest, 1835 Black Lake Blvd. SW, Olympia, WA 98512, email rpmetzger@fs.fed.us, phone: 360-956-2293.

Dean Yoshina
District Ranger
Hood Canal Ranger District

DATE

Table DN-1. Response to comments on the Preliminary EA.

Commenter	Comment	Forest Service Response
Carol Volk	Please keep in mind that the Gray Wolf and Dungeness River sections affected by this large wood enhancement project (especially the Lower Dungeness between the campground and the hatchery) are frequented by whitewater kayakers. These woody debris projects can be designed well, or dangerously—we've encountered both on the Olympic rivers. Whatever you do, do not design a structure like the ones placed on Hyas Creek some years ago—it was an unportageable death trap for whitewater enthusiasts!	The following design considerations will be incorporated into log jam placement to minimize potential safety risks to recreational kayakers (EA, pg. 25): • All jams will be located within unconfined areas of the river along the river margins • No channel spanning jams will be constructed. • The jams will provide ample room to allow kayakers to safely navigate around them. • The jams will not be located below directly below blind corners to allow adequate sight distance for route planning.